

RESPONSE TO COMMENTS FOR THE NPDES PERMIT
of the
HOBART WASTEWATER TREATMENT PLANT

1st Public Notice September 16, 2003

2nd Public Notice February 11, 2004

Indiana Department of Environmental Management
Office of Water Quality
April 1, 2004

Response to Comments for the City of Hobart NPDES Permit

Over the past few years, the draft NPDES permit for the City of Hobart's Wastewater Treatment plant has been public noticed for comments on more than one occasion. A public meeting and public hearing have been held and as a result of these opportunities for comment, there have been many comment letters submitted and oral testimony was presented at the public hearing. IDEM staff has reviewed the letters and the hearing transcript, and staff has compiled the comments which are relevant to the proposed permit action into this document. Due to the fact that many of the comments were duplicative and/or overlapped, the comments have been sorted into categories and summarized in an attempt to minimize duplicate responses.

Although IDEM considered all comments submitted, this Response to Comments only addresses comments submitted during the official public comment periods and the public hearing. However, any comments submitted in writing, whether within an official public comment or not, are public records and may be reviewed at IDEM.

During the second public comment period there were several verbal requests for a public hearing, but only one written request was made for a public hearing. In the public notice of February 11, 2004, the notice stated that IDEM would determine whether or not to hold another public hearing based upon the comments and the rationale for the request. IDEM determined that there was insufficient justification presented as to the need for a second public hearing.

Written comments were submitted by the following persons and businesses during the 2 public comment periods for the draft permits:

Farm Bureau Insurance, 3586 N. Hobart Rd., Hobart, IN
Sheila Blatz, 2435 Riverside Dr., Lake Station, IN
Mrs. Tom Boswell, 3802 Riverdale St., Lake Station, IN
Mr. James A. Boyd, Sr., 3298 Ripley St., Lake Station, IN
Mr. James G. Busch, 3164 Ripley St., Lake Station, IN
Josie Collins, 2901 Fairview Ave., Lake Station, IN
Constance D. Courtney, 2531 Orange St., Lake Station, IN
Ms. Ethel Ellis, 1928 Riverside Dr., Lake Station, IN
Mr. & Mrs. B.E. Frost, 3322 Hobart Rd., Lake Station, IN
Mr. Edward Hero, 2785 Wyoming St., Lake Station, IN
Mr. Wendell L. Hodges, 2215 Putnam St., Lake Station, IN
Mr. James B. Meyer, Attorney for GSD, 353 S. Lake St., Gary, IN
Mr. Paul G. Mullins, 1685 E. 32nd Ave., Hobart, IN
Mr. Richard L. Morehouse, 1330 S. Ash St., Hobart, IN

Ms. Charlotte M. Mores, 3440 Old Hobart Rd., Lake Station, IN
Francis J. Redar, 3102 Old Hobart Rd., Lake Station, IN
Ms. Cynthia Robbins, 2942 Wells St., Lake Station, IN
Ms. Donna Rossi, 3616 Marquette Rd., Lake Station, IN
Mr. & Mrs. Roy Samuels, 3405 Wisconsin St., Lake Station, IN
Ms. Suzanne Scherfner, 2957 Miami St., Lake Station, IN
G. Schwartz, 2215 Riverside Dr., Lake Station, IN
Ms. Gloria Shukitis, 1933 Riverside Dr., Lake Station, IN
Ms. Shirley Slider, 3816 Riverside Dr., Lake Station, IN
Mr. Ian Stetler, 5965 Sundance Tr. #206, Portage, IN
Mr. John W. Stetler, 2994 Old Hobart Rd., Lake Station, IN
Mr. & Mrs. Thomas Stokes, 2756 Old Hobart Rd., Lake Station, IN
Mr. Jim Sweeney, Conservation Committee Chair
Izaak Walton League of America, c/o 1773 Selo Dr., Schererville, IN
Mr. Robert L. Todd, 3151 Old Hobart Rd., Lake Station, IN
Mr. Bill Troutman, 2566 Newton St., Lake Station, IN
Mr. & Mrs. Jim Vanderlin, 2647 Montgomery St., Lake Station, IN
Mr. John E. Vinzant, V.P. Vinzant Inc., 904 Old Ridge Rd., Hobart, IN
Mr. Lynn B. West, Jr., 2401 Riverside Dr., Lake Station, IN
Ms. Michelle Williams, 2211 Riverside Dr., Lake Station, IN
Mr. William Wright, 750 E. Van Buren Ave., Hobart, IN

The following persons presented oral comments at the public hearing on Oct. 16, 2003:

Mr. Richard Carey, City Engineer's Office, Lake Station, IN
Mr. Guido Borgnini, HNTB Consulting Engineers, 111 Monument Circle, Indianapolis, IN
Mr. Clarence E. Durall, Sr., Councilman, 4101 Cosner Ave, Lake Station, IN
Mr. Tom Ehrhardt, Councilman, 3805 Harms Road., Merrillville, IN
Mr. Bill Hebert, 2525 Riverside Drive, Lake Station, IN
Mr. Edward Hero, 2785 Wyoming St., Lake Station, IN
Mr. Pete Mendez, 34 N. Union St., Hobart, IN
Mr. Tom Skees, New Chicago, IN
Mr. Patrick Strickland, 3223 Ripley Street, Lake Station, IN

WATER QUALITY ISSUES:

Comment #1:

Where is the IDEM water-quality study of Deep River?

Response #1:

IDEM did not conduct a water-quality study on Deep River per se. Instead, the City of Hobart was required to provide detailed sampling data for various parameters including ammonia-nitrogen, temperature, hardness and pH, metals, and those organic or inorganic compounds found in the City's discharge at levels above detection. That information was utilized by IDEM in the formulation of the effluent limits incorporated into the City's draft NPDES permit. See also Response #4.

Comment #2:

In the public meeting on the antidegradation study, IDEM indicated that it was unfavorable to issuing the permit due to heavy metals and mercury expected to be in the plant effluent. The City of Hobart cannot possibly achieve the mercury limit stated in the NPDES permit.

Response #2:

IDEM believes the commentor misinterpreted what IDEM staff stated at the public meeting. In order to evaluate the ability of the microfiltration process to achieve the stringent limits incorporated into the proposed NPDES permit, a bench-scale treatment facility was recently created in West Lafayette, Indiana. The City of Hobart also has plans to construct a pilot-scale treatment facility in Hobart, Indiana. These studies will be utilized in the design of the full-scale wastewater treatment plant. It is the permittee's responsibility to ensure that the design of the treatment facility is capable of meeting the proposed effluent limitations in the NPDES permit.

Comment #3:

The discharge will result in nitrogen degradation, algae blooms and additional sedimentation beyond that caused by the dredging of Lake George.

Response #3:

The proposed permit limits for ammonia-nitrogen, phosphorus, and total suspended solids are

very stringent and will help ensure that the nutrient and solids loading to Deep River will be minimal. IDEM does not anticipate any problems with the water quality of the receiving waters.

Comment #4:

Other parameters not accounted for in the NPDES permit will be discharged into Deep River such as metals and volatile organic compounds. There is no indication from the information available in the draft permit that all other potential BCCs, such as pesticides and PCBs, and non-BCCs, such as copper and other toxics, have been adequately evaluated.

Response #4:

As part of the initial review of the application, the City of Hobart was required to characterize its effluent with six months of wastewater and stream sampling before a final WLA was completed. IDEM required a scan of the City of Hobart's discharge to the Gary S.D. WWTP for volatile organic compounds, acid-extractable compound and base-neutral compounds on a day when industrial or commercial discharges, if any, were occurring at normal levels. IDEM also required sampling for cadmium, chromium, copper, lead, mercury, nickel, and zinc, chloride, cyanide, fluoride and sulfate. Sampling was also conducted in Deep River near the expected discharge point for background concentrations of ammonia-nitrogen, temperature, hardness, pH, metals, and organic or inorganic compounds found in the City's discharge at levels above detection. Sampling was scheduled in order to demonstrate seasonal variability and the natural variability of temperature, hardness and pH for Deep River. IDEM utilized this data to develop the Proposed Effluent Limits using the Reasonable Potential to Exceed procedures in the NPDES rules. Due to the significant amount of detailed information contained within the Hobart wasteload allocation studies, IDEM merely incorporated the information by simple reference. IDEM is confident that adequate evaluation efforts were made by the City and that additional discharge limitations are not required at this time.

Comment #5:

When the City of Hobart opens the dam floodgates, they flood the downstream residents and cause erosion in order to protect Hobart at the expense of the property owners in Lake Station. With the advent of the sewer plant there will be additional flooding that will cause sewage to be deposited in residents yards.

Response #5:

The City of Hobart will be constructing a treatment works capable of handling wet weather flow, thus eliminating the chance for a bypass of raw sewage from the treatment works. IDEM understands the many concerns regarding flooding and the possible environmental risk.

However, IDEM does not have control over dam floodgates or knowledge about flooding or erosion that may occur as a result of their operation. Other state and local entities, including the Lake County Drainage Board and the Indiana Department of Natural Resources' Division of Water have certain statutory authority regarding the volume of discharges granted to them under Indiana Code (IC 14 and IC 36-9-27).

Comment #6:

One commentor is concerned that the proposed discharge will result in not only a potential fish kill, but also a potential "human kill".

Response #6:

The City of Hobart, as part of its NPDES permit application, was required to provide extensive detailed data to characterize its wastestream and the quality of Deep River. That information was utilized by IDEM in the formulation of the proposed effluent limits incorporated into the City's draft NPDES permit. These limitations incorporated into the City of Hobart's NPDES permit (which are based upon Indiana's water quality criteria) are expected to protect not only the aquatic life in Deep River but also human health. After the extensive treatment process of the raw sewage has occurred, the discharge would not be construed as human waste but instead as treated effluent reflective of some of the most stringent discharge requirements in the State of Indiana. IDEM is confident that the discharge will not endanger human health for residents along Deep River. The proposed WWTP will not have any overflows or bypasses in the design; therefore there should be no discharges of untreated sanitary wastewater.

Comment #7:

The new wastewater treatment plant will lead to hepatitis outbreaks by discharging sewage.

Response #7:

The City of Hobart will be constructing a treatment works that is capable of handling wet weather flow, thus eliminating the chance for a bypass of the treatment works. The proposed treatment works will fully treat and disinfect its discharge to the Deep River; thus, there will be only a discharge of fully treated effluent, not sewage. As Hepatitis A outbreaks occur from contact of fecal material from either a household member already carrying the virus or transmission due to poor sanitary conditions, that is, contact with raw untreated sewage involving oral ingestion, the likelihood of a Hepatitis A outbreak in the general population from the treated discharge is considered by IDEM to be essentially non-existent.

Comment #8:

Wet weather flow diversion will destroy the river and give everyone Hepatitis B.

Response #8:

The likelihood of an outbreak of Hepatitis B is very minimal as the virus is not spread through food, water or casual contact but by blood or body fluids. Hepatitis A is the usual pathogen associated with poor sanitary conditions regarding sewage contamination.

Comment #9:

One third of the flow of Deep River will be sewage and it's unacceptable.

Response #9:

Actually, the discharge from the treatment works proposed by the City of Hobart will not be raw sewage but fully treated wastewater. This discharge will have to meet strict effluent discharge limits in accordance with current State rules and statutes. It should be noted that many of the existing sanitary wastewater treatment plants in the State of Indiana are located in the upper reaches of watersheds such that the streams are considered "effluent dominated" streams.

ANTIDEGRADATION COMMENTS:

Comment #10:

Deep River does not meet its designated use, fishable, as a fish consumption advisory for mercury exists for Deep River. Additionally, data indicates that ambient mercury concentrations in Deep River exceed the water quality criteria. Therefore, we conclude that the Commissioner is barred from allowing the proposed new discharge.

Response #10:

IDEM agrees that a fish consumption advisory exists for Deep River and that ambient mercury concentrations have exceeded water quality criteria. That is why Hobart's permit contains mercury limits that have been established by applying the mercury water quality criteria end-of-pipe. EPA has indicated that new discharges are not prohibited on impaired waters, provided the relevant water quality criteria are applied end-of-pipe as effluent limitations (i.e., without dilution). See *Water Quality Guidance for the Great Lakes System: Supplementary Information Document (SID)* (EPA-820-B-95-001, March 1995), Section VIII.E.2.h.

Comment #11:

327 IAC 5-2-11.7(a)(2) addresses a new discharge to a tributary to an OSRW. This section

of the antidegradation regulations established a two-prong test for new discharges to a tributary to an ORSW within the Great Lakes system. Subsections (A) and (B) comprise the parts of the two-prong test. Simply stated the new discharge to a tributary to an ORSW:

- Shall not cause a lowering of water quality in the tributary, and
- Shall not cause a significant lowering of water quality in the ORSW.

Subsection (A) of this section provides that 327 IAC 5-2-11.3(a) and (b) apply to the new discharge. As stated above, the proposed new discharge would cause a lowering of water quality in the tributary to the ORSW (increase in mercury load where the ambient water quality exceeds the water quality criteria) and thereby violate the provisions of item (a) of section 11.3.

Additionally, subsection 11.7(a)(2)(B) provides that the discharge shall not cause a significant lowering of water quality in the ORSW. Based upon the definition of ‘significant lowering of water quality’ at section 11.3(b)(1), it is clear that the new discharge of a BCC is not allowed.

Response #11:

327 IAC 5-2-11.7(a)(2)(A) and (B) provide:

(2) For a new or increased discharge of a pollutant or pollutant parameter from a new or existing Great Lakes discharger into a tributary of an ORSW for which a new or increased permit limit would be required:

(A) section 11.3(a) and 11.3(b) of this rule apply to the new or increased discharge of a pollutant or pollutant parameter into the tributary; and

(B) the discharge shall not cause a significant lowering of water quality in the ORSW.

IDEM interprets these provisions as follows. Clause (A) of subdivision (2) is essentially a recognition of the fact that the provisions of sections 11.3(a) and (b) apply to a new or increased discharge of a pollutant into a tributary of an ORSW. Because Deep River is not a high quality water for mercury, the provisions of section 11.3(b), along with the definition of “significant lowering” for BCCs contained therein, do not apply. For mercury, the applicable antidegradation implementation procedures are contained in subsection (a) of section 11.3, and IDEM applied the mercury water quality criteria end-of-pipe (without dilution) in order to protect designated and existing uses.

Clause (B) of subdivision (2) of section 11.7(a) is independent of clause (A) and prohibits a significant lowering of water quality in the ORSW itself. In other words, the definition of significant lowering contained in section 11.3(b) does not apply in clause (B) of section

11.7(a)(2). IDEM has never interpreted the definition of significant lowering in section 11.3(b) to apply in section 11.7(a)(2)(B). That is why IDEM adopted nonrule policy document Water-002-NRD in 1998 and provided criteria for when IDEM would deem a significant lowering of water quality in Lake Michigan not to have occurred. As explained in the background section of the policy, “The rule [11.7(a)(2)(B)] does not set forth a definition of significant lowering” Water-002-NRD, p. 1.

Comment #12:

327 IAC 5-2-11.7(a)(2)(C) delineates when requirements related to subsections (A) & (B) have been met. Gary Sanitary District’s review of items (i), (ii), and (iii) included under subsection (C) indicated that the requirements of the respective items were not met. Additionally, only item (iii) provides for an ‘exception’ related to net environmental improvement. To qualify under item 11.7(a)(2)(C)(iii) all of the subitems included in the item must be met. Subitem (AA) of this section references 11.3(b)(1)(C)(iii)(DD), (JJ) and (KK). Each of these subitems provides for relief in the case of pollutants that are non-BCCs, and thereby are not satisfied in the case where the new discharge includes a BCC.

Based upon the above review it is our position that the nonrule policy document is in conflict with the regulation. As clearly stated in the NRD, “This nonrule policy document shall be used in conjunction with applicable laws. It does not replace applicable laws, and if it conflicts with these laws, the laws shall control.” Accordingly, we believe that the new discharge of mercury from the proposed Hobart WWTP would result in a significant lowering of water quality, both in Deep River and in Lake Michigan, and would violate the Great Lakes system antidegradation provisions, 327 IAC 5-2-11.3 and 327 IAC 5-2-11.7. Therefore, the proposed permit cannot be issued.

Response #12:

Clause (C) of section 11.7(a)(2) does contain provisions pursuant to which the requirements of clauses (A) and (B) of subdivision (2) will be considered to have been met. It is correct that the provisions listed in section 11.7(a)(2)(C)(iii) cannot be used for the discharge of a BCC, although the provisions in clause (C) could still be applied to other pollutants (even if the discharge included a BCC).

The listed provisions in clause (C) are not the exclusive means for meeting the requirements of clauses (A) and (B) of subdivision (2). Corollaries of the provisions now listed in clause (C) of subdivision (2) were previously provided for in the prior version of section 11.7 in subsections (b) and (c). The prior version of section 11.7(b) stated “Subsection (a)(1) *and* (a)(2) do not

apply to the following actions . . .” and section 11.7(c) stated “Notwithstanding subsection (a)(1) *and* (a)(2), the commissioner may permit the actions in subdivision (1) or (2) . . .” (emphasis added). Thus the provisions listed in former section 11.7(b) and 11.7(c) for when a discharge could occur regardless of the restrictions in section 11.7(a)(2)(A) and (B) applied to dischargers to tributaries of OSRWs, as well as to direct dischargers to OSRWs. The reasoning was that dischargers to tributaries of OSRWs should not be treated more stringently than direct dischargers to OSRWs.

When section 11.7 was amended, the types of exemptions and exceptions previously provided for in subsections (b) and (c) with respect to discharges to tributaries were consolidated into clause (C) in subsection (a)(2), and the reference to subsection “(a)(2)” was deleted from subsections (b) and (c). The amended section 11.7(a)(1)(2) identified the exemptions and exceptions according to the corresponding provision in section 11.3 (for instance, the provision previously set forth in narrative form at section 11.7(b)(1) was incorporated by referencing section 11.3(b)(1)(C)(i)). IDEM was not creating a new provision that essentially functioned as a definition of significant lowering for purposes of discharges to tributaries of OSRWs when it relocated and reworded these provisions; IDEM was merely attempting to consolidate the provisions related to discharges to tributaries of OSRWs in one spot for clarification. That is also why OWQ has never withdrawn the nonrule policy document.

IDEM agrees that the NPD cannot be used to replace applicable laws and if there is any conflict between the rules and the policy, the rules control. However, the policy is not in conflict with the rules for the reasons given above, and IDEM is using the policy in conjunction with section 11.7 to interpret whether the proposed discharge to Deep River would violate the provisions of section 11.7(a)(2)(B). Therefore, IDEM does not agree that the new discharge would violate the Great Lakes system antidegradation provisions and that the proposed permit cannot be issued.

Comment #13:

IDEM has noted that the more stringent effluent limits for mercury, ammonia-nitrogen and copper than are currently applicable to Gary Sanitary District (GSD) are a benefit attributable to the new Hobart wastewater treatment plant’s discharge in its antidegradation review. GSD believes that this argument is not germane since the purpose of water quality-based effluent limits is to protect water quality from adverse impact.

Response #13:

IDEM calculated two possible sets of effluent limits for Hobart. One set was calculated following the standard procedures set forth in 327 IAC 5 for establishing WQBELs. These limits would have resulted in a significant lowering of water quality as defined under 327 IAC 5-2-11.3 and triggered the need for Hobart to submit an antidegradation demonstration. This, in turn, would have required Hobart to receive approval of its demonstration before it would be allowed to discharge at the level of the WQBELs. The second set of limits was based on calculations designed to ensure that a significant lowering of water quality in the Deep River did not occur (essentially the City was given limits based on background concentrations for copper and ammonia and, for mercury, criteria applied end-of-pipe); these limits were more stringent than the WQBELs. Hobart chose to accept the more stringent limits. These more stringent limits were not actually required to prevent an adverse impact on water quality in Deep River; they were chosen to avoid having to go through an antidegradation demonstration. Had Hobart pursued the option of submitting an antidegradation demonstration and received approval, the City would not have had to comply with the more stringent limits currently in the proposed permit. The proposed limits are more stringent than those set forth in the GSD NPDES permit. Therefore, IDEM believes it is appropriate to say that the more stringent effluent limits for those pollutants will contribute to the overall environmental benefit to Lake Michigan.

Comment #14:

The numerical analysis contained within the antidegradation review which concludes that the GSD will discharge certain pollutant parameters at a rate of 29 times that of the proposed Hobart Sanitary District wastewater treatment plant is flawed.

Response #14:

IDEM agrees with the comment and has revised the estimate appropriately in the fact sheet.

Comment #15:

There is a reference to the use of IDEM Nonrule Policy Water-002-NRD but there is no explanation as to which, if any, of the several terms of that document were used in formulating the permit.

Response #15:

The fact sheet of the draft permit which was public noticed on February 11, 2004 contains a discussion as to which terms of the nonrule policy document were relied upon for drafting this NPDES permit.

Comment #16:

The first sentence in Section A(1) on Page 2 of 3 of the nonrule policy document which purports to define “significant lowering of water quality” to not include an activity that otherwise causes such a lowering but “will result in a significant overall environmental benefit to Lake Michigan” and to be used as an alternative to the requirements of sections 11.3(b)(1)(A) & (B) violates the rules. GSD can find no legal support for such a proposition and would submit that, even if it was legal, there would have to be an advertised, thorough, open and public evidence gathering process which has not occurred in this case.

Response #16:

Section A(1) of the NPD provides that a new or increased discharge into a tributary of Lake Michigan will not cause a significant lowering of water quality in Lake Michigan if the new or increased discharge into the tributary is the result of an activity that will result in a significant overall environmental benefit to Lake Michigan. As explained in the prior responses, IDEM does not agree that the NPD violates the rules.

The fact sheet of the draft NPDES permit which was public noticed on February 11, 2004 included an explanation of IDEM’s interpretation of how the antidegradation provisions were met and allowed the public to submit comments on the draft permit and fact sheet. The public, including GSD, had an opportunity to submit evidence or any additional information during this comment period. Additionally GSD could have requested a public hearing and did not.

Comment #17:

327 IAC 5-2-11.3(a) applies to “all waters within the Great Lakes system” which 327 IAC 2-1.5-2(41) defines as “all streams, rivers,....within the drainage basin of the Great Lakes within Indiana. Clearly, Deep River falls within this definition and is not acknowledged in the permit or fact sheet.

Response #17:

This comment has been remedied within the final NPDES permit and the final version of the fact sheet.

Comment #18:

The permit and fact sheet fail to articulate why the proposed discharge will not cause a significant lowering of water quality in Lake Michigan.

Response #18:

This comment was submitted during the first public comment period (Public Notice date of September 16, 2003). A full explanation of the rationale has now been included in the February 11, 2004 fact sheet under separate headings pertaining to 327 IAC 5-2-11.3 and 11.7 in an attempt to clarify IDEM's stance on these issues and thus this comment is remedied within the issued permit.

Comment #19:

Nowhere in the permit is the requirement contained within 327 IAC 5-2-11.3(a) that stipulates, "Where water quality does not support the designated uses of a waterbody or ambient pollution concentrations are greater than the water quality criteria applicable to that waterbody, the commissioner shall not allow a lowering of water quality for the pollutant or pollutants that prevents attainment of such uses or the water quality criterion." The permit acknowledges that the Deep River is impaired for copper and mercury, and other pollutants but fails to (1) implement the ban against lowering of water quality and (2) fails to require any antidegradation demonstration despite the proposed discharge unarguably causing a significant lowering of water quality because of additional BCC loading.

Response #19:

The NPDES rules do not actually require that the provision quoted above be included in the permit. 327 IAC 5-2-11.3(b)(2) does require that the permit prohibit the regulated facility from undertaking any deliberate action that would result in a new or increased discharge of a BCC or a new or increased permit limit for a non-BCC unless certain criteria are met. That provision has been included in the permit in Part II.A.17. IDEM incorporates an effluent limit to protect existing and designated uses on a pollutant by pollutant basis. IDEM only considers an antidegradation study necessary when high quality waters are involved and a discharge of the pollutant in levels above de minimis is being considered (recognizing that there is no de minimis amount for BCCs). The Deep River is impaired for mercury (not copper), and therefore is not a high quality water for mercury. IDEM has included a permit limit for mercury by applying the mercury criteria end-of-pipe in order to satisfy the requirements of 11.3(a). Again, EPA has indicated that such an approach is permissible (see response to comment #10 above).

Comment #20:

IDEM has chosen to ignore the large capital improvement projects which are being at least partially funded through an SRF loan. Part of the reason may be that IDEM has not advised the GSD that it was attempting to do some mass balance calculation in regards to Hobart's permit application nor did it request information from GSD or provide GSD an opportunity to submit evidence on the issue prior to IDEM making a determination. If IDEM had asked, GSD would have provided irrefutable proof that there are fewer CSOs in GSD's system than stated,

there will be fewer in the near future, and the periodic discharges on an annual basis from the remaining active CSOs through which any of Hobart's flows could pass within the same time period it will take for the City of Hobart to build its plant will be minimal. Furthermore, GSD has postponed building a retention basin due to the pendency of Hobart's permit application which would have eliminated any of Hobart's flow to GSD from being discharged into the Little Calumet River. If Hobart had paid GSD its proportionate share of the capital improvements and used the remainder for the new plant to instead improve its lift station, connect the Nob Hill system to it and spend the remainder on reducing I & I, that would have been better for the environment than any benefit from the new plant. If there is going to be some type of decisional process employed by IDEM weighing the evidence as to what is best for the environment, that process should not be ex parte but should include an opportunity for GSD and the many opponents to the Hobart plant to submit their evidence, not just comments, review and critique of the evidence the Commissioner is relying on.

Response #20:

Neither GSD nor any other member of the public was restricted to merely reviewing or commenting on the antidegradation rationale used by the Commissioner in the fact sheet for the proposed permit. GSD could have submitted any information it deemed relevant to the proposed antidegradation determination or any other provision of the permit either in the comment period or outside of it. GSD also could have requested a public hearing with respect to the re-public noticed proposed permit to present its arguments, but chose not to do so.

IDEM does not have any information to support GSD's contention that there will be fewer CSOs in the near future and the periodic discharges on an annual basis from the remaining active CSOs through which any of Hobart's flows could pass within the same time period it will take for the City of Hobart to build its plant will be minimal. Regarding the retention basin, IDEM's SRF program sent GSD a letter dated August 28, 2000, in which it commented that the flow equalization basin proposed at 32nd and Broadway contained wetlands which required federal and state permits before the site could be used. As a result, that project could not be approved until the permitting issues were resolved. IDEM did not receive a response from GSD to this item in the August 28th letter and therefore has no way of knowing why GSD did not pursue building this basin.

IDEM is not in a position to evaluate whether Hobart owed any money to GSD, how much, or how that money could have been or could be spent other than spending it on the proposed new plant.

Comment #21:

GSD requests the results of the evaluation for copper and mercury that resulted in the determination that the proposed new discharge to the Deep River would not result in a significant lowering.

Response #21:

The copper determination is contained within the wasteload allocation study (WLA) of July 12, 2002. IDEM has provided GSD with a copy of this WLA. The City of Hobart was provided with two possible sets of effluent limits for copper. The first set of limits were based on the standard procedures set forth in 327 IAC 5 for establishing water quality-based effluent limits. These limits would have resulted in a significant lowering of water quality under 327 IAC 5-2-11.3(b)(1)(B). The second set were based on not causing a significant lowering of water quality as defined in 327 IAC 5-2-11.3(b)(1)(B). The City of Hobart accepted the second set of effluent limits for copper and, thus, did not have to submit an antidegradation demonstration for copper. For mercury, Deep River was found not to be a high quality water based on instream sampling conducted by the City of Hobart. Therefore, the procedures set forth in 327 IAC 5-2-11.3(b)(1)(A) were not applied to mercury.

PLANT PERFORMANCE & CONSTRUCTION ISSUES:

Comment #22:

The Fact Sheet discussion on page 1 states that the bench-scale test data indicates that the proposed treatment process is capable of meeting the ammonia-nitrogen and mercury limits. No test data was available for review in the IDEM files. This data should be made available for review and comment prior to the issuance of the NPDES permit.

Response #22:

IDEM had not obtained any testing data prior to the public notice of the Hobart draft NPDES permit on February 11, 2004. The information that was referenced in the fact sheet was based on oral statements from representatives of the City of Hobart, who indicated that the proposed treatment plant is capable of meeting the limits for ammonia-nitrogen and mercury. IDEM did not believe it was necessary to obtain the data before public noticing the draft permit. However, IDEM has recently obtained testing data from the bench-scale model, and it is now available for review.

Comment #23:

The plant description used the term “membrane filtration” and “membrane bioreactor”. There is

no information in the IDEM files to describe this treatment process. A detailed description of the process should be provided.

Response #23:

The treatment facility description of a wastewater treatment plant is contained within the NPDES permit for information to characterize the wastestream(s) that is being permitted. The purpose of the NPDES permit is to establish the allowable effluent limitations and specific discharge conditions for the proposed discharge, regardless of what type of treatment is being proposed. While in this case, the level of treatment that will be necessary for meeting such very stringent limits is of interest to the general public, the permit does not dictate specific equipment requirements.

Membrane filtration is an advanced treatment technology that has been used in many countries for both water and wastewater treatment applications to produce high quality effluent. The process provides a barrier that enables the removal of all contaminants larger than the membrane's pore size.

Comment #24:

GSD believes that due to the novelty of applying microfiltration as a treatment process for sewage, performance data from the proposed pilot plant should be required and checked against the RPE determinations prior to further consideration of issuance of the proposed permit since a variance is not permissible under 327 IAC 2-1.5-17(a)(3).

Response #24:

IDEM historically has not required verification of plant performance for municipal wastewater treatment plants prior to issuing an NPDES permit. Instead, the engineering assessment of plant design associated with the issuance of the construction permit has been the mechanism by which the permittee must demonstrate that it is capable of meeting the NPDES permit limits.

Comment #25:

There are separate and combined sewers. Where does sewage go in event of plant failure?

Response #25:

Older sewer systems typically feature combined sewers, that is, sewers designed to carry both sanitary and storm water. It is IDEM's understanding that the City of Hobart has a 100% separate sanitary sewer system by design. The City of Hobart does not have any combined sewer overflows. All wastewater in the City's collection system will be transported to the

sewage treatment plant. Hobart plans to address wet weather flows by incorporating equalization basins in the design so that bypassing of the treatment plant can be avoided. Part II.B.5 of the permit requires the permittee to provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, or to halt, reduce or otherwise control all discharge in order to maintain compliance with the effluent limitations and conditions of the permit upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of the permit.

Comment #26:

Further detail on the plant make-up should have been included in the draft permit. There is no detailed process description, flow diagram nor general bases of design for the proposed treatment facility in order to allow potentially affected parties to adequately evaluate the proposed facility for the purpose of submitting comments.

Response #26:

A flow diagram has been included in the fact sheet as Attachment 1. Please see also the response to comment #23.

GENERAL COMMENTS:

Comment #27:

The chronic biomonitoring program requirements does not include a demonstration of acute toxicity as provided for in the earlier draft version.

Response #27:

This language was inadvertently deleted from the second official draft permit. The language has been added back into the final NPDES permit.

Comment #28:

The permit requires mercury monitoring to be conducted bi-monthly. This frequency of monitoring is inconsistent with the proposed monthly average limitation included in the permit.

Response #28:

It is IDEM's current practice to only require mercury monitoring six times per year due to the costs involved in testing when using EPA Test Method 1631. It does not preclude a permittee from monitoring more frequently, and in fact if there are violations of the permit limits, Part II.A.2 of the permit contains a provision to require accelerated or additional monitoring (as

appropriate or as requested by IDEM) during periods of noncompliance with the permit. If, for any reason, more than one effluent sample is taken during a calendar month, then those results must be averaged and reported on the monthly reports of operation. The permit may also be reopened and modified pursuant to Part II.A.6 or Part I.C of this permit which could result in more frequent monitoring if sufficient grounds exist to support the increased frequency.

Comment #29:

The mercury monitoring frequency is inconsistent with the fact that based upon currently available data for municipal wastewater treatment facilities, there is a very high probability the effluent from the proposed facility has a reasonable potential to exceed the monthly average limitation for mercury.

Response #29:

It is the permittee's responsibility to ensure that the permitted discharge meets the effluent limitations in the NPDES permit. The City of Hobart will be using advanced microfiltration as a unit process. It is IDEM's understanding that the results of the bench-scale treatment facility which includes the use of microfiltration, show that Hobart should be capable of meeting the proposed effluent limits for mercury.

Comment #30:

IDEM issued preliminary effluent limits for the proposed facility for lead. These limits were calculated at a level which would not result in a significant lowering of water quality. The final wasteload allocation of July 12, 2002, as well as the draft permit, did not include effluent limits for lead. No explanation has been provided and the evaluation of RPE and effluent limits calculations are not available in the permit files.

Response #30:

Prior to the final model of July 12, 2002, a preliminary determination of reasonable potential was made using the first three of six months of data collected by the City of Hobart. The City of Hobart had used a high limit of detection for lead which resulted in the reasonable potential analysis showing a need for an effluent limit for lead. The City of Hobart subsequently used a lower limit of detection for lead and the resulting data did not show a need for an effluent limit for lead. The data used in the reasonable potential analysis are included in the model of July 12, 2002. IDEM provided a copy of the WLA to GSD.

Comment #31:

The Fact Sheet incorrectly states that there are nine CSO outfalls through which Hobart's current wastewater flows may discharge during wet weather. Wastewater discharged by Hobart flows past eight CSO outfalls prior to reaching GSD.

Response #31:

This comment has been remedied within the final version of the fact sheet for the Hobart NPDES permit.

Comment #32:

What will be the form of sludge application? Will it be on the wastewater plant property itself?

Response #32:

With respect to the proposed sludge treatment and disposal process, Hobart will be required to dispose of their sludge in accordance with 329 IAC 10, 327 IAC 6.1, or 40 CFR Part 503. Hobart does not plan to landfill any sludge nor apply the sludge on the treatment plant site. They intend instead to produce a Class A sludge which will allow for land application. This method requires strict adherence with pathogen reduction, vector attraction reduction and allowable metals concentrations.

Comment #33:

The whole NPDES permit process has been nothing but a back room secret deal to illegally discharge pollutants to Lake Station.

Response #33:

IDEM's authority is solely that of ensuring that wastewater treatment facilities in Indiana comply with federal and state NPDES regulations and state water quality standards. The NPDES permit process has been open to public participation and scrutiny as evidenced by the public meeting which was held on July 19, 2001, the two public comment periods concerning the draft NPDES permit on September 16, 2003 and February 11, 2004, and a public hearing that was held on October 16, 2003. IDEM has implemented the applicable rules in an open public process.

Comment #34:

Will the new Hobart wastewater treatment plant protect the National Lakeshore and Lake Michigan, especially if the discharge point is required by IDEM to be moved to a direct discharge to Lake Michigan?

Response #34:

Yes, the fully treated effluent will be required to meet some of the most stringent effluent limitations in the State of Indiana. These limits were set to protect aquatic and human life at the point of discharge into the Deep River and will be fully protective of the National Lakeshore as well as Lake Michigan. IDEM does not intend to require the discharge point to be moved to a direct discharge to Lake Michigan.

Comment #35:

Does Executive Order 11988 (which pertains to floodplain management) apply to Hobart?

Response #35:

Executive Order 11988, which applies to floodplain management, is applicable to federal agencies and departments. The Indiana Department of Environmental Management does not believe that this order would affect the agency's review or issuance of either the construction permit or the National Pollutant Discharge Elimination System permit for this project.

Comment #36:

Who is responsible for the wildlife when the Hobart sewer plant opens?

Response #36:

The City of Hobart, as part of its NPDES permit application, was required to provide extensive detailed data to characterize their wastestream and the quality of Deep River. That information was utilized by IDEM in the formulation of the proposed effluent limits incorporated into the City's draft NPDES permit. These limitations incorporated into the City of Hobart's NPDES permit are based on water quality standards and are protective of wildlife, aquatic life in Deep River, and human health. The Indiana Department of Natural Resources has jurisdiction over the existing forms of wildlife living in or around Deep River.

Comment #37:

The drinking water will become contaminated by the discharge of the new Hobart sewer plant.

Response #37:

No evidence exists that any surface water contamination or groundwater contamination will take place due to the operation of the proposed Hobart wastewater treatment plant. It should be noted that groundwater typically flows in a direction that is towards a stream, not away from it. Also as previously stated, the proposed discharge is subject to very stringent effluent limitations that are protective of human health, aquatic life, and wildlife criteria. Therefore the proposed discharge from the Hobart WWTP into Deep River is not expected to have any negative impact on the drinking water in the area.

Comment #38:

The discharge from the Hobart WWTP will pollute the river that irrigates farm fields. The smell will also have a dramatic effect on the population and a fatal effect on business.

Response #38:

The effluent limitations that are incorporated into the City of Hobart's NPDES permit are based on water quality standards and are protective of wildlife, aquatic life in Deep River, and human health. Part of the process that takes place before a wastewater treatment plant can be built is a review of the design by qualified engineers in order to ascertain that the proposed facility will be capable of meeting the effluent limits set by the wasteload allocation. In addition, the City of Hobart is taking the extra steps to construct both a bench-scale facility and a pilot-scale facility to further refine the final design of the proposed wastewater treatment plant. A well-run wastewater treatment plant should not have objectionable odor. However, it should be noted that odor at the wastewater treatment plant is not regulated per se by the NPDES permit, although Part I.A.2 of the draft NPDES permit prohibits the discharge from causing odor in the receiving stream.

Comment #39:

The GSD submits that it was not appropriate for IDEM to merely take unsworn statements of the City of Hobart as proof of important facts, such as process removal percentages, without any independent verification or even citation to a source that could provide verification.

Response #39:

Removal efficiencies were applied to cadmium, copper, mercury and zinc in the reasonable potential analysis in the model of July 12, 2002. The removal efficiencies applied were provided by the City of Hobart. While the removal efficiencies were provided through unsworn statements, IDEM did find the removal efficiencies for cadmium, copper and zinc to be reasonable after comparing them to those listed in Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program, U.S. EPA, December 1987. IDEM could not find any U.S. EPA guidance on removal efficiencies for mercury based on data collected using Method 1631. However, despite the use of the removal efficiency for mercury that was provided by the City of Hobart, it still resulted in the need for an effluent limit for mercury in the draft NPDES permit.

Each NPDES permit application contains a certification statement that the information submitted by the applicant is true, accurate and complete. The certification statement also goes on to remind the applicant that they are required to have made inquiry of all persons immediately responsible for obtaining the information and that there are significant penalties including possible imprisonment for submitting false information.